

*Iowa Judicial Branch*  
**Digital Audio/Video Recording Technology (DART) Committee**  
**Notes from the 4th Meeting (Final)**  
**October 9, 2009; Des Moines**

All committee members in attendance except: Guy Cook and Gerald Olson. State court administration staff attending: John Goerdts and Scott Ruhnke. Other non-members attending some or all of the meeting: District Judge Robert Blink, court reporters: Sheryl Culver, Karen Teig, and Di Schleisman, and attorney Bill Wimmer.

**1. Welcome and approval of the notes from the meeting on June 26**

- a. The meeting began at 9:30 AM. The committee's co-chairs, Chief Judge Charles Smith and Beth Baldwin, welcomed the committee and reviewed the agenda.
- b. A motion was made and seconded to approve the meeting notes from the committee meeting July 31; motion passed unanimously.

**Reports on Site Visits**

**NOTE:** *The written reports from each site visit team are available on the judicial branch website at: [www.iowacourts.gov](http://www.iowacourts.gov) [click on "DART Study" – then click on "Information" – then scroll down to "Materials from the 4<sup>th</sup> Committee Meeting (10-09-09)"].*

**2. Report on the Federal Courts in Omaha and Lincoln, NE**

- a. A group of five visited both courts in one day (Committee members: Judge Smith, John French, and Darin Raymond; plus John Goerdts, Kent Wirth (4<sup>th</sup> District Court Administrator), and Terri O'Grady (Judge Smith's court reporter)).
- b. Both courthouses are relatively new (1970s construction). Two tech staff serve these two courthouses. They spent \$50,000 on just the PA system in one courtroom in Lincoln.
- c. The courtrooms were very quiet; just one case at a time with two attorneys, the defendant, the judge, and the judge's courtroom clerk, who manages the DART equipment and keeps the log notes; Iowa district courts are rarely so quiet, especially on court service days.
- d. All the magistrate judges, plus Judge Richard Kopf in Lincoln (an Article III judge), use digital recording only to capture the verbatim record; they started using Sony analog tape recorders in the early 1990s and moved to a digital recording system (**VIQ**) five years ago. All other Article III judges use court reporters.
- e. The team met with Magistrate Judge F.A. Gossett in Omaha and Judge Kopf in Lincoln. Both use DART exclusively and are strong supporters of the technology.
- f. Judge Kopf reported only one incident in the past five years (since they started using a digital recording system) in which they lost the audio recording due to a technical problem; fortunately there was no appeal from that proceeding.
- g. In Lincoln, the team also met with a U.S. Attorney, a federal public defender, and a private defense attorney. All three were strong supporters of DART. They have never encountered a problem with the digital recordings, and they are not aware of any problems with transcripts produced from digital recordings for appeals.

- h. Attorneys especially like the quick access to the recording of a proceeding. Recordings from the morning are uploaded to the federal courts' PACER system by 12:30 PM; the afternoon proceedings are uploaded by 5:30 PM. They can be accessed by anyone and listened to using Windows Media Player.
- i. The team also met with a couple court reporters. They reported that the Article III judges like the benefits of real-time reporting, which the DART system cannot provide. The court reporters said it takes 3 to 4 times longer to produce a transcript from a digital recording compared to producing a transcript from their own reporter notes. They also indicated that there are no specific standards or qualifications for people who do transcriptions from the digital recordings. (Judge Kopf said they use a list of experienced transcriptionists.)
- j. Discussion: One member of the site visit team said he does not like having microphones on the attorney desks; they are intrusive. He also believes attorneys often rustle through papers on the desk and that noise would obscure voices on other microphones. (Another team member noted that the transcriptionist could mute the microphones from everyone but the person speaking – which would reduce or eliminate the paper rustling noise.)

### **3. Report on the state district court in Rochester (Olmsted Co.), MN**

- a. In Minnesota, each judicial district decides which DART system to use. Rochester uses **FTR**; Minneapolis uses Courtsmart; Willmar uses High Criteria.
- b. Rochester (and some other districts) used analog tape systems prior to purchasing digital recording systems a few years ago.
- c. They moved to electronic recording in most or all courtrooms because they were having a hard time finding sufficient applicants when court reporter positions opened up. They did not replace court reporters (CRs); the CRs operate the equipment in most courtrooms, but some are operated by "electronic reporters (ERs)," who are paid the same as certified court reporters. There is a separate certification for ERs. The district maintains one CR or ER per judge, as provided by state statute.
- d. CRs and ERs report much less trouble with carpal tunnel since ERs and sometimes the CRs rely on the digital recordings to produce transcripts.
- e. Everyone interviewed during the visit (judges, attorneys, CRs, ERs, and staff) was very satisfied with the digital recording system. They have never lost the recording of even a part of a hearing due to human or technical failure. They emphasized the importance of having experienced and knowledgeable CRs/ERs operating the equipment in each courtroom.
- f. If someone requests a copy of the digital recording of a court hearing, it will be provided on a CD within 3 days at a cost of \$10.00.
- g. It takes only a few seconds for the court reporter to playback a recorded statement, when requested. (It took a little longer to do this in Minneapolis.)

#### **4. Report on the state district court in Minneapolis (Hennepin Co.), MN**

- a. This court uses a CourtSmart DART system that features a camera in each courtroom, which allows multiple court reporters in a central control room in the courthouse to simultaneously monitor and keep log notes for up to four courtrooms each. The video is not recorded. The system creates only audio recordings of court proceedings.
- b. One team member was surprised that the people doing the monitoring in the central control room were not frantically busy; it was mostly relaxed. Seldom have something going on in all 4 courtrooms at the same time. They typically entered less detailed log notes than in Rochester.
- c. They try to maintain one CR or ER per judge, consistent with state statute, but there are always a few vacant positions.
- d. They use DART for all cases, though judges often use steno CRs for serious criminal or civil cases because they like real-time reporting. For short hearings, they use the central monitors only.
- e. They have 2 microphones installed on the rail in front of the jury box (1 on each end) and use DART to record jury selection. These 2 mics pick up the voices. Fixed microphones are less obtrusive than handing a portable mic to each juror.
- f. Like Rochester, the court in Minneapolis has never lost the recording of even a part of a hearing due to human or technical failure. They also attribute their success not just to the quality of the DART system, but to the role played by court reporters in running and monitoring the system.
- g. Long-term storage of recordings on DVDs; 1 drawer – about 3 feet wide X 3 feet deep – contains all the recordings from Hennepin Co. for the past 3 years.
- h. Transcripts are produced by the CR or ER employed by the court – usually on their own time; they get per page as in IA.
- i. One of the managers in Hennepin Co. did an extensive study of electronic recording in their courts. She reviewed 520 transcripts from electronic recordings. Most problems with those transcripts came from a single transcriptionist/reporter
- j. One team member noted that in Minneapolis the microphones are so sensitive and the recordings are so complete that attorneys have to be careful what they say; there is a toggle button on the microphones that allow the mics to be muted while the button is held down.
- k. Court reporters claimed they have fewer health problems (e.g., hands, carpal tunnel) than before DART was installed; overall the court reporters were very happy with the system.
- l. The team talked with a state appellate court judge; the judge found no difference between transcripts from digital recordings or from steno reporters – and no difference between districts with different DART systems. They were all very good.

#### **5. Report on the state district court in Willmar (Kandiyohi Co.), MN**

- a. Kandiyohi Co. is one of 13 rural counties in MN's 8<sup>th</sup> judicial district, which is in the western part of the state; the district is very similar to Iowa's rural areas
- b. All courts in the district use High Criteria's Liberty Court Recorder system (audio only), which they chose because it is user-friendly, costs less than FTR or CourtSmart, and produces high quality recordings.

- c. The team talked with judges, attorneys, and staff; everyone is very satisfied with the DART system, the quality of the recordings, and the transcripts produced from the recordings. Judges in Willmar believe the transcripts from digital recordings are more accurate than transcripts solely from steno notes because the recordings are very clear and the transcriptionist can listen to sections multiple times.
- d. A court reporter -- either a certified steno reporter or certified electronic reporter -- monitors the equipment and keeps log notes during proceedings. Judges and staff believe that having a trained staff person responsible for ensuring a clear and complete recording is a key to the effective use of DART in courtrooms. The court reporter is the one who tells attorneys to speak louder or stand near a microphone.
- e. Certification requirements for an electronic reporter are much less rigorous than for certified steno reporters.
- f. Each judge has a steno or electronic CR in the courtroom -- plus a clerk who helps prepare orders and prints them out in the courtroom.
- g. Most judges leave it up to the reporter to decide whether she or he wants to keep a steno record (if there's a steno reporter). Court reporters will often do this when there is a substantial likelihood that there will be an appeal --because it takes less time to produce a transcript from a steno record than from a digital recording.
- h. Judges typically don't allow playback for recorded statements; they usually ask the person to repeat what they said. However, a reporter can do a playback that if requested.
- i. Attorneys are also very satisfied with the DART system. No problems with inaudible; no problems with transcripts.
- j. The DART systems are separate from the PA systems in each courtroom in the judicial district.

#### **6. Report on the state circuit court in Wheaton (DuPage Co.), IL**

- a. This is a courthouse in a relatively affluent western suburb of Chicago; it is a very nice facility with 40 courtrooms -- for about 46 judges.
- b. They installed DART equipment (CourtSmart) 10 years ago because they were having trouble recruiting enough certified court reporters.
- c. Like Minneapolis, they have a central monitoring room where several court reporters monitor 3 or 4 courtrooms at a time.
- d. Judges have 3 support staff in the courtroom (whereas Iowa's judges usually have just a court reporter).
- e. Steno reporters always report felonies and juvenile cases.
- f. The equipment in Wheaton is 10 years old. They have never budgeted for replacing the equipment. They pay \$90,000/year for a maintenance agreement.
- g. One team member observed that Minneapolis also uses a CourtSmart system with central monitoring; the Minneapolis system is newer and much better managed than the one in Wheaton.
- h. A court reporter told the team it takes three hours to produce a transcript from one hour of recording, which is much longer than it takes from steno notes.
- i. One of Iowa's court reporters contacted a court reporter in Wheaton who thinks the quality of the recordings in Wheaton is terrible. Also, the central monitors enter few

log notes, so it's difficult to know who was speaking when trying to produce a transcript.

- j. The 2 judges and 2 attorneys who were selected to meet with the team said they thought the DART system was fine.
- k. One team member said they learned that the manager at the court in Wheaton who organized the site visit – including selection of the judges, staff, and attorneys who were available to meet with the Iowa team – did not allow the team to speak with court reporters that had negative views about the DART system. Consequently, some team members believe they were not allowed to obtain a complete or accurate review of the DART system in Wheaton.
- l. A team member expressed concern that court managers in other site visit locations also might have skewed the selection of the people our teams were allowed to meet so we would hear only positive reviews about DART. Other site visit team members who visited Salt Lake City, Rochester, and Minneapolis expressed the view that they were given the opportunity to meet with a wide range of judges, attorneys, and staff and felt their team obtained an objective picture of the DART systems in those cities.

## **7. Report on the state circuit court in Salt Lake City, UT**

- a. Utah is similar to Iowa in geographic and population size. One very large urban center (SLC) and many very rural, sparsely populated counties.
- b. All the courtrooms have FTR systems; most are audio only; some have video.
- c. They began implementing electronic recording systems in courtrooms almost 20 years ago due to a shortage of certified court reporters; they started installing digital recording systems about 5 years ago. During the last recession, they laid-off of many court reporters but continued to use CRs in serious criminal and complex civil cases. Last year, they laid-off the last group of CRs. They now rely solely on DART, though attorneys may bring their own CR to report a trial. They will also report capital murder trials.
- d. The site visit was very well organized. They had the opportunity to speak with several attorneys, court managers, the state court administrator, judges -- including appellate court judges – who are in the same building as the trial courts in SLC.
- e. Each judge has 2 to 3 support staff.
- f. They observed a civil trial; the DART system appeared to be unobtrusive. A judicial assistant monitors the recording equipment in each courtroom, keeps minutes of testimony (doesn't use FTR log notes utility), and ensures that attorneys stay near a microphone and speak loudly enough.
- g. They started implementing FTR systems with video recording, but they encountered some problems with the video system -- so they now record only audio; the judges liked the video and hope to eventually return to video recording throughout the state. The audio recording system works well, however.
- h. FTR video system: included 4 cameras in each courtroom; each one sends video to one of 4 panels on the courtroom monitor screen (so the video doesn't jump around depending on who is speaking). This 4-camera system adds about \$4500 to the cost of DART per courtroom.
- i. Cost of their current FTR software and equipment: \$18,000 per courtroom.
- j. Staff said performing a playback is easy, but it's seldom required.

- k. Voir dire of juries: they have microphones installed on the jury box railing. This seems to work well.
- l. Attorneys seem to like the system
- m. Ordering a recording: Court staff will burn a CD with the recording of a hearing upon request, for pick-up at the end of the day. Cost = \$10 per CD.
- n. Ordering transcripts: They recently implemented a centralized online ordering system for transcripts. It's operated by the Clerk of the Appellate Courts. Fees go to the courts to support court technology. Order online and the audio recording is delivered to the transcriptionist via email. They have reduced time from request to the delivery of a transcript from 137 days to 11 days!
- o. One of the SLC judges reported on a survey that there were "persistent problems with inaudible" on the recordings. The team talked with that judge, who seemed more positive about the DART system than was expressed in the survey. Sometimes they get a transcript that reports an inaudible, but if you go back and listen to the recording you can hear what was said.
- p. Attorneys prefer to have court reporters produce the transcripts.
- q. Judges in SLC were amazed at how much work IA judges have to do (and how few support staff we have); UT judges never have to type their own orders, decrees
- r. The UT state court administrator explained that they are engaging in an effort to re-think the way they organize their clerk office and judicial support staff; forming teams that handle cases from start to finish
- s. The UT Judicial Council is also interesting; it includes supreme court chief justice, 1 district judge elected from each judicial district, 2 juvenile judges, and a lawyer who serve 1 6-year term. They make policy and court rules; not just advisory.
- t. Question: A UT judge says litigants are entitled to a record, but not a perfect record. Are we settling for less if we move to DART, rather than actual court reports?  
Response: Court reporters aren't perfect either.
- u. Comment: UT moved to DART because they had to; IA doesn't have to. UT also took 20 years to phase in DART and phase out CRs – and they still have 3 support staff for each judge.

## **8. Report on the state courts in Anchorage, Alaska**

- a. Chief Judge Smith visited the courts in Anchorage in September (without expense to the Iowa courts) on the day before his niece got married there. He called a couple weeks before his visit to arrange meetings with judges and staff.
- b. Alaska is celebrating its 50<sup>th</sup> anniversary since statehood. The Alaska courts have never used court reporters; they've always used electronic (tape, more recently digital) recording systems.
- c. They used FTR for a few years, but switched to CourtSmart (audio only) about 3 years ago because CS has a backup system that Alaska's court administrators preferred over FTR's. However, they do not use the central monitoring approach that CS is most noted for. They do conduct centralized backup of recordings, which are stored on central servers for 2 years – then moved off to permanent archive on DVDs.
- d. A courtroom clerk monitors the DART equipment and enters very brief log notes.
- e. Central ordering of transcripts: The state court administrator's office hired 11 transcriptionists; 9 are court reporters; 9 live in the lower 48 states. The transcript

manager tests the transcriptionists. She sees no difference between the CRs and the other transcriptionists in the quality of work. If an “inaudible” appears on the transcript, she checks the recording. Sometimes it actually is audible.

- f. Judge Smith spoke with 2 judges from the Alaska Court of Appeals (both from Iowa!). They both practiced law in other states before moving to Alaska, so they have some experience with court reporters. They both prefer a transcript from a DART recording because they can listen to the recording if they have any questions about it.
- g. The judges do not believe video is necessary; audio recordings are fine.
- h. The AK courts bought the CourtSmart software, but installed their own audio equipment (microphones, mixers, etc.) – which saved them money.
- i. Bottom line: the Court of Appeals judges are satisfied with the quality of the transcripts.

#### **9. Report on a site visit to the state court in Phoenix (Maricopa Co.), AZ**

- a. Beth Baldwin, DART Committee’s co-chair, was in Phoenix at a meeting (not related to the DART Committee). She learned from materials handed out at the first DART meeting that AZ used DART for many types of cases, so she called the court in Phoenix to arrange a short visit while she was there.
- b. The courts in Phoenix started installing electronic recording systems in 1996 (audio only). They use FTR software. A local audio equipment vendor provides support.
- c. Many courtrooms now have video recording systems. Attorneys like video; they’ve learned to use it to impeach witnesses.
- d. There’s a judicial assistant in each courtroom who monitors the DART equipment; they do not use FTR’s log notes software; they use their own notes program.
- e. They still have about 50 court reporters who report all serious criminal cases and complex civil.
- f. Since 1996 the AZ state court administrator’s office has had a “Keeping the Record Committee” that developed standards and policies for keeping records of court proceedings and to monitor progress and issues as they arise. The group continues to meet periodically. This seems like a good idea that Iowa might emulate.
- g. Comment: AZ also took a decade to get where they are now. They did it with the oversight of a statewide committee. They were deliberate about it. This is a good model for Iowa.

#### **10. General Conclusions/Observations Derived from Site Visit Findings?**

- a. One key: Having trained and skilled staff running the equipment and ensuring an accurate audio record.
- b. DART equipment is reliable. It operates without technical problems or failure for long periods, sometimes for years. Everyone in all the sites we visited agree on this.
- c. The challenges involve the management of the system, ensuring proper staffing and courtroom procedures, transcript production, etc.
- d. Costs are also an issue. Costs vary by vendor, the type of recording system (audio-only vs. video), nature of the courtroom (e.g., size, acoustics, need for new wiring and PA system). You won’t know the cost for a specific courtroom until you go there. There are also possible implications for “network” upgrades (e.g., servers), regional and/or central tech support staff, and expansion of cabling/bandwidth – especially if

we adopt video recording, which creates much larger recording files (i.e., more kilobytes of storage space).

- e. Question: Is this a cost-saving measure? Response: Utah moved to DART as a cost-saving measure. It could save money over the long-term.

## **Reports from DART Test Locations in Iowa**

### **11. Report on test of DART (VIQ Solutions) in Story County (Judge Bill Pattinson)**

- a. Using a system installed by Voice IQ Solutions (VIQ), Inc., from Canada
- b. 8 microphones – each recorded on a separate channel
- c. 1 camera
- d. The courtroom in Nevada is relatively new with very good acoustics.
- e. Question: *What was your experience with the installation, training, and customer service provided by the vendor?* Response: VIQ installed a system toward the end of September. It includes one video camera, which is focused on the witness. The judge has a very good staff person monitoring the equipment and keeping the log notes. VIQ staff trained her how to operate the system.
- f. Question: *How is the system working?* Response: After some initial technical problems were resolved, the system has worked well.
- g. Question: *What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: He reads instructions to the parties and attorneys at the start of each hearing to remind people about the DART system, to have everyone speak into a microphone, not to talk at the same time, etc. This seems to help. A district associate judge ran a “rocket docket” in his courtroom and did not read instructions, but you could still hear everyone who spoke during the proceedings.
- h. Question: *Have you had any problems with the DART system?* Response: No problem on the first day when the VIQ staff were there; conducted a divorce trial that went well. There were technical problems the next day; system didn’t work. The help desk at VIQ was not very helpful. It took a while to get the problem fixed. It works well now.
- i. Question: *How is the quality of the DART recordings?* Response: The microphones installed by VIQ in his courtroom pick up everything. We asked for 8 microphones, which is probably too many. The voices bleed over into all the microphones. However, in VIQ’s free recording player you can mute the sound on the various tracks and focus just on the sound from one track. The sound is excellent.
- j. Question: *Other comments or observations?* Response: The judge visited Rochester and Minneapolis with the site visit team and has concluded that the systems in Rochester (FTR) and Minneapolis (CourtSmart) are more user-friendly.

### **12. Report on DART system in Dickinson County (District Associate Judge David Larson)**

- a. Using a system installed by High Criteria, Inc., from Canada (their Liberty Court Recorder software system for management of audio/video recordings)
- b. 8 microphones – each recorded on a separate channel
  - 2 on each attorney table
  - 1 for the judge



- 1 for the witness
- 1 for the jury (jury selection)
- 1 for bench conferences
- c. 1 camera mounted above and behind the judge
- d. Courtroom is relatively new, quiet, and has a very good PA system
- e. There are probably too many microphones; the sound is picked up by all the microphones
- f. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: Excellent. They trained 2 clerks via a 2 to 3 hour webinar, then came to Spirit Lake to personally train and demonstrate the system. Gordon Bennett, from High Criteria, stayed through the first entire day of court sessions to ensure the system worked correctly and to answer any questions.
- g. *Question: How is the system working?* Response: It's working well. The court attendant enters only very basic log notes. We would need more training and standards on this.
- h. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: The system picks up voices from throughout the courtroom. A parent in a juvenile case was in the back row and her voice could be heard on the recording.
  - There are no mute buttons on the attorneys' microphones. Attorneys don't like this. We should recommend mute buttons.
  - The judge cannot enter his own log notes, though this is an option with a permanent installation.
  - For juvenile cases, they turn off the camera. There's some debate about whether we can record video in juvenile cases.
  - The courtroom clerk turns the system on when the judge enters the courtroom and turns it off when the judge leaves the courtroom.
- i. *Question: Have you had any problems with the DART system?* Response: No technical problems, though there are probably too many microphones (8).
- j. *Question: How is the quality of the DART recordings?* Response: Yes. Our first recorded session involved an attorney participating via telephone conference call. His voice was heard through the PA system and picked up by the microphones in the courtroom. This was a good test of the system. You should be able to get a good transcript because you have the ability to listen to it multiple times, slow down the speed of the audio when playing it back, and isolate each track.
- k. *Question: Other comments or observations?* Response:
  - We should have a mute button on microphones for attorneys and the judge so you can mute it while holding the button down.
  - The wide angle camera helps identify who is speaking.
  - 1 microphone at the jury box is probably enough to pick up juror voices.
  - Easy to use: The judge received no training. He learned how to operate it on his own time. Very user-friendly.

### **13. Report on DART system in Polk County (District Associate Judge Greg Brandt)**

- a. Using a system installed by For the Record (**FTR**), Inc., from Arizona (their FTR Gold Recorder software system for management of audio/video recordings)

- b. 8 microphones – each recorded on a separate channel
- c. 1 camera to help identify speakers
- d. It's a long and narrow courtroom. 25 criminal hearings on a slow day; 75 on a busy day. Often have many people in the courtroom with many conversations going on.
- e. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: They installed 2 microphones on the bench; 1 for sidebars. But we seldom do sidebars, so that 1 is unnecessary
  - Attorney microphones have mute toggle-buttons, which mute when the button is pressed down
  - The installers worked on the installation to get good recordings in this long and narrow room with bad acoustics. They turned down the recording volume on the microphones for attorneys and turned it up on the judge's microphone.
  - The judge operates the system without the assistance of a court attendant. It's very easy to run. He turns it on and off for each case. He keeps his own log notes. He enters a "bookmark" at the start of each case (case number and title). He keeps "Notes" in a separate on-screen column from the bookmarks.
  - There's a digital time clock on his bench facing the attorneys and parties; it has very large red numbers so everyone can see them. If the time digits are in operation, everyone knows that the DART system is operating. It's a good visible reminder to everyone.
- f. *Question: How is the system working?* Response: It seems to be working well. Before the DART system, he had a court reporter keep the record about 40% of the time. Now he's recording everything with DART and has a CR only when required by the Code.
- g. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: He doesn't give verbal instructions to attorneys. He posted written instructions on the doors outside the courtroom and on the attorney tables. Attorneys are now more likely to talk to their clients out in the hallway, rather than in the courtroom. This has probably reduced the noise level in the courtroom.
- h. *Question: Have you had any problems with the DART system?* Response: None so far. There was a problem with the video cable they installed. FTR sent one by FedEx and it's been fine since then.
- i. *Question: How is the quality of the DART recordings?* Response: The recording quality is good. Slightly less quality than live.
  - The camera shows the tables for attorneys and parties and the witness stand. The judge is not visible.
  - Microphones on attorneys' tables are on long arms, which get moved around. But parties/attorneys sit at the tables only 25% of the time. Pleas and sentencings are done at the front of the room and recorded by the microphone at the bench.
- j. *Question: Other comments or observations?* Response: The judge likes the system. He sometimes takes the DART recording into his chambers to listen and confirm his written notes on the case. You can see the witness and assess credibility.

**14. Report on the portable DART system in District 8 (Associate Juvenile Judge Bill Owens, who participated via conference call)**

- a. The judge travels regularly to five counties for juvenile hearings.
- b. The courtrooms vary in size, acoustics, etc.
- c. *Question: What was your experience with the installation, training, and customer service provided by the vendor?* Response: FTR delivered a portable laptop-based system, with a small audio mixer and 4 portable microphones with small stands. This all fits in a small suitcase on wheels. Very light and portable. FTR trained 2 court attendants on how to set it up and operate it. FTR staff stayed during the first 2 hearings. They were very helpful.
- d. *Question: How is the system working?* Response: There are 4 microphones: one for the judge, one for the county/state's attorney, one for child's attorney, and one for witnesses. His court attendant is skilled at setting everything up, monitoring the system, and keeping log notes. Albia's courtroom has the worst acoustics, with a high ceiling. It sounds like a cave. The system seems to be working well. The court attendant enters the case number in the log notes at the start of the hearing and enters the name of each attorney or witness when she or he begins to speak in court.
- e. *Question: What standard instructions or procedures related to the DART system are you using in the courtroom and how are they working?* Response: He doesn't give verbal instructions to attorneys. He places the 1-page set of written instructions on the attorney tables. The attorneys don't always identify themselves at the start of a hearing, so the judge will say their names on the record.
- f. *Question: Have you had any problems with the DART system?* Response: They had a technical problem with the software on the first day. The FTR tech staff solved it in 10 minutes. No problems since then.
- g. *Question: How is the quality of the DART recordings?* Response: The microphones appear to be very sensitive. In Albia, a father was whispering to the mother. The judge couldn't hear what they were saying. The attorney sitting next to the mother said he couldn't hear what was said. But the court attendant, who was monitoring the recording system while wearing head phones, said she could hear what was said. (The recording monitor hears what's been recorded, so the recording also picked this up.) The court attendant (who also participated with Judge Owens via conference call) said that when you play back a recording, you can mute all the tracks except the one on which the speaker is recorded, which reduces background noise. You can also slow down the speed of the playback in case someone was speaking too fast.
- h. *Question: Other comments or observations?* Response: The recordings seem clear. He'd like to see a transcript from a contested proceeding.

**15. Discussion of the next steps for the committee**

- a. Evaluation of recordings from the 5 DART test courtrooms in Iowa
  - (1) Next week the co-chairs will contact the judge in the 5 test courts and ask that each judge select one hearing -- 20 to 30 minutes in length -- that has already been conducted in the previous few days.
  - (2) The judge's court attendant/DART equipment monitor should email a copy of the recording for that hearing to John Goerdt, who will forward copies of the digital recordings to the committee members.

- (3) We will ask the court reporter for each of these judges to produce a written transcript of the hearing and send a copy of the transcript (and a bill) to John Goerdts.
  - (4) We will contract with an independent transcription company to have written transcripts produced based solely on the digital recordings for the same 5 hearings.
  - (5) Each committee member will be expected to listen to at least one of the recorded hearings and compare the two transcripts (tasks 3. and 4., above) to the recording. We will provide committee members with an evaluation form to assist with this part of the evaluation.
  - (6) Committee members must be prepared to report on their evaluations at the next committee meeting.
  - b. Reports from judges and others in the DART test locations
    - We will ask judges, court reporters, and court attendants who worked in the DART test courtrooms to participate in the next committee meeting to discuss their experiences with the DART systems.
  - c. Identify general findings and conclusions on the main issues before the committee
- 16. Next meeting: November 18 in Des Moines at 9:30 AM**
- The agenda will focus on the three tasks in item 15 (above)